

For more Information
please call

1-800-Belden1



General Description:

Low Loss Serial Digital Coax, Plenum-CMP, RG6 18 AWG solid bare copper conductor, foam FEP core, Duofoil®+95% tinned copper braid, Flamarrest® jacket

Usage (Overall)

Suitable Applications: SMPTE 2081-1 6 Gb/s UHD TV, SMPTE 424M 3 Gb/s HD-SDI 1080p

Physical Characteristics (Overall)

Conductor

AWG:

| # Coax | AWG | Stranding | Conductor Material | Dia. (mm) |
|--------|-----|-----------|--------------------|-----------|
| 1 | 18 | Solid | BC - Bare Copper | 1.016 |

Total Number of Conductors: 1

Insulation

Insulation Material:

| Insulation Trade Name | Insulation Material | Dia. (mm) |
|-----------------------|--|-----------|
| Teflon® | FFEP - Foam Fluorinated Ethylene Propylene | 4.318 |

Outer Shield

Outer Shield Material:

| Layer # | Outer Shield Trade Name | Type | Outer Shield Material | Coverage (%) |
|---------|-------------------------|-------|--|--------------|
| 1 | Duofoil® | Tape | Aluminum Foil-Polyester Tape-Aluminum Foil | 100 |
| 2 | | Braid | TC - Tinned Copper | 95 |

Outer Jacket

Outer Jacket Material:

| Outer Jacket Trade Name | Outer Jacket Material |
|-------------------------|---------------------------------------|
| Flamarrest® | LS PVC - Low Smoke Polyvinyl Chloride |

Overall Cable

Overall Nominal Diameter: 5.817 mm

Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +75°C

UL Temperature Rating: 75°C

Bulk Cable Weight: 61.016 Kg/Km

Max. Recommended Pulling Tension: 306.926 N

Min. Bend Radius/Minor Axis: 63.500 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMP

CEC/C(UL) Specification: CMP

EU Directive 2011/65/EU (ROHS II): Yes

EU CE Mark: No

| | |
|---------------------------------------|------------|
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2002/95/EC (RoHS): | Yes |
| EU RoHS Compliance Date (mm/dd/yyyy): | 04/01/2005 |
| EU Directive 2002/96/EC (WEEE): | Yes |
| EU Directive 2003/11/EC (BFR): | Yes |
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MII Order #39 (China RoHS): | Yes |
| RG Type: | 6/U |

Flame Test

| | |
|-----------------|----------|
| UL Flame Test: | NFPA 262 |
| CSA Flame Test: | FT6 |

Suitability

| | |
|-----------------------|-----|
| Suitability - Indoor: | Yes |
|-----------------------|-----|

Plenum/Non-Plenum

| | |
|--------------------|-------|
| Plenum (Y/N): | Yes |
| Non-Plenum Number: | 1694A |

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

75

Nom. Inductance:

Inductance (µH/m)

0.337943

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)

52.8241

Nominal Velocity of Propagation:

VP (%)

82

Nominal Delay:

Delay (ns/m)

4.06844

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

20.9984

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

9.1868

Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100m)

| | |
|---------|-------|
| 1.000 | 0.787 |
| 3.580 | 1.476 |
| 5.000 | 1.805 |
| 7.000 | 2.133 |
| 10.000 | 2.461 |
| 67.500 | 5.709 |
| 71.500 | 5.840 |
| 88.500 | 6.365 |
| 100.000 | 6.890 |

1695A Coax - Low Loss Serial Digital Coax

| | |
|----------|--------|
| 135.000 | 7.874 |
| 143.000 | 8.203 |
| 180.000 | 9.187 |
| 270.000 | 11.155 |
| 360.000 | 13.124 |
| 540.000 | 17.061 |
| 720.000 | 20.014 |
| 750.000 | 20.342 |
| 1000.000 | 24.279 |
| 1500.000 | 31.170 |
| 2000.000 | 37.075 |
| 2250.000 | 40.028 |
| 3000.000 | 47.903 |
| 4500.000 | 61.027 |
| 6000.000 | 73.494 |

Max. Operating Voltage - UL:

| |
|----------------|
| Voltage |
| 300 V RMS |

Other Electrical Characteristic 1: Impedance: 75 +/- 3 Ohms

Other Electrical Characteristic 2: Return Loss: Fixed bridge and termination.

Minimum Return Loss:

| Start Freq. (MHz) | Stop Freq. (MHz) | Min. RL (dB) |
|-------------------|------------------|--------------|
| 5.000 | 1600.000 | 23.000 |
| 1600.000 | 4500.000 | 21.000 |
| 4500.000 | 6000.000 | 15.000 |

Sweep Test

Sweep Testing: 100#37; Sweep tested 5 MHz to 6 GHz.

Notes (Overall)

Notes: Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc. Print legend includes sequential footage marks.

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|----------------|-----------|-------------|-------------|-------|-------------------|
| 1695A N3U1000 | 1,000 FT | 44.000 LB | GREEN, MIL | C | #18 FFEP SH FLRST |
| 1695A N3U10000 | 10,000 FT | 370.000 LB | GREEN, MIL | | #18 FFEP SH FLRST |
| 1695A 0011000 | 1,000 FT | 44.000 LB | BROWN | C | #18 FFEP SH FLRST |
| 1695A 00110000 | 10,000 FT | 370.000 LB | BROWN | | #18 FFEP SH FLRST |
| 1695A 002Z1000 | 1,000 FT | 40.000 LB | RED | | #18 FFEP SH FLRST |
| 1695A 0021000 | 1,000 FT | 44.000 LB | RED | C | #18 FFEP SH FLRST |
| 1695A 00210000 | 10,000 FT | 370.000 LB | RED | | #18 FFEP SH FLRST |
| 1695A 003Z1000 | 1,000 FT | 40.000 LB | ORANGE | | #18 FFEP SH FLRST |
| 1695A 0031000 | 1,000 FT | 44.000 LB | ORANGE | C | #18 FFEP SH FLRST |
| 1695A 00310000 | 10,000 FT | 370.000 LB | ORANGE | | #18 FFEP SH FLRST |
| 1695A 004Z1000 | 1,000 FT | 40.000 LB | YELLOW | | #18 FFEP SH FLRST |
| 1695A 0041000 | 1,000 FT | 44.000 LB | YELLOW | C | #18 FFEP SH FLRST |
| 1695A 00410000 | 10,000 FT | 370.000 LB | YELLOW | | #18 FFEP SH FLRST |
| 1695A 006Z1000 | 1,000 FT | 40.000 LB | BLUE, LIGHT | | #18 FFEP SH FLRST |
| 1695A 0061000 | 1,000 FT | 44.000 LB | BLUE, LIGHT | C | #18 FFEP SH FLRST |
| 1695A 00610000 | 10,000 FT | 370.000 LB | BLUE, LIGHT | | #18 FFEP SH FLRST |
| 1695A 006500 | 500 FT | 22.000 LB | BLUE, LIGHT | | #18 FFEP SH FLRST |
| 1695A 007Z1000 | 1,000 FT | 40.000 LB | VIOLET | | #18 FFEP SH FLRST |
| 1695A 0071000 | 1,000 FT | 44.000 LB | VIOLET | C | #18 FFEP SH FLRST |
| 1695A 00710000 | 10,000 FT | 370.000 LB | VIOLET | | #18 FFEP SH FLRST |
| 1695A 0075000 | 5,000 FT | 220.000 LB | VIOLET | | #18 FFEP SH FLRST |
| 1695A 0081000 | 1,000 FT | 44.000 LB | GRAY | C | #18 FFEP SH FLRST |
| 1695A 00810000 | 10,000 FT | 370.000 LB | GRAY | | #18 FFEP SH FLRST |

1695A Coax - Low Loss Serial Digital Coax

| | | | | | |
|----------------|-----------|------------|---------|---|-------------------|
| 1695A 010Z1000 | 1,000 FT | 40.000 LB | BLACK | | #18 FFEP SH FLRST |
| 1695A 010Z500 | 500 FT | 22.000 LB | BLACK | | #18 FFEP SH FLRST |
| 1695A 0101000 | 1,000 FT | 44.000 LB | BLACK | C | #18 FFEP SH FLRST |
| 1695A 01010000 | 10,000 FT | 370.000 LB | BLACK | | #18 FFEP SH FLRST |
| 1695A 010500 | 500 FT | 22.000 LB | BLACK | C | #18 FFEP SH FLRST |
| 1695A 0105000 | 5,000 FT | 210.000 LB | BLACK | C | #18 FFEP SH FLRST |
| 1695A 877Z1000 | 1,000 FT | 40.000 LB | NATURAL | | #18 FFEP SH FLRST |
| 1695A 8771000 | 1,000 FT | 44.000 LB | NATURAL | C | #18 FFEP SH FLRST |
| 1695A 87710000 | 10,000 FT | 370.000 LB | NATURAL | | #18 FFEP SH FLRST |
| 1695A 877500 | 500 FT | 22.000 LB | NATURAL | Z | #18 FFEP SH FLRST |

Notes:

C = CRATE REEL PUT-UP.

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND(+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

Revision Number: 10 Revision Date: 04-12-2017

© 2019 Belden, Inc
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.